

September 28, 1950

Dr. and Mrs. C. F. Cori  
Washington University School of Medicine  
King's Highway  
Saint Louis, Missouri

Dear Doctor and Mrs. Cori:

Many thanks for your kind congratulatory message. I was hoping that I would have the opportunity of seeing you in Bethesda to tell you personally how indebted I felt to both of you in so many ways. We are looking forward to when you may be able to come to either a Study Section or an Academy meeting and spend some pleasant hours as we have in the past.

The local excitement concerns the appointment of Doctor Sebrell as Director of the NIH to succeed Doctor Dyer who is retiring because of age. I think Doctor Sebrell's appointment will be a favorable one for us, both from the standpoint of his interest in letting people do what they enjoy doing and his genuine dislike for elaborate administrative structure.

I might mention some of the laboratory developments that might be of interest to you: Horecker seems to have some fairly good evidence that the oxidation of phosphogluconate in yeast proceeds by way of beta-keto oxidation, decarboxylation to a ribulose phosphate which is in equilibrium with ribose-5-phosphate. He has separated these two pentose phosphates chromatographically and is now trying to purify the enzyme in order to localize the initial reaction.

Seegmiller and Horecker have been able to work out a synthesis of glucose-6-phosphate by the use of polyphosphate to a point where with only a few days' work one can obtain approximately 40 grams of 80% purity or more.

Heppel has been able to purify yeast inorganic pyrophosphatase about tenfold beyond the Bailey and Webb preparation. The preparation may be homogeneous at this point, but there is hardly any assurance of that. One of the important steps in the preparation is to make a rather alkaline extract of dry yeast which is about 50 times richer in activity than the autolyzate of fresh yeast.

Dr. and Mrs. C. F. Cori  
September 28, 1950  
Page 2

Heppel has also been able to show with his 5-nucleotidase preparation from bull semen that Todd's uridine-5-phosphate and the nucleotide obtained by Park from Staphylococci are probably identical.

I want to say here that if you find any use for glucose-6-phosphate or highly active yeast pyrophosphatase, I would be delighted to send some along.

I have been making some rather feeble efforts to learn something about nucleotide production in yeast, and, incidental to this, was able to study the system that phosphorylates adenosine in position 5. Aside from some persistent myokinase, the reaction appears to be a direct phosphorylation by ATP.

An item of personal interest that may not have reached you is that we have a new baby boy, named Kenneth, who is now two months old. In case you have lost count, this makes three boys, with Rogie (the Saint Louis product) and Tommy.

With best regards,

Sincerely,

Arthur Kornberg

AK:RSB